

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons which follow.

Claims 1, 7 and 8 are currently being amended.

Claims 12-14 are being added.

This amendment adds and changes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, are presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-3 and 5-14 are now pending in this application.

Applicants acknowledge receipt of an Office Action dated December 19, 2002. In this response Applicants have amended claims 1, 7 and 8 and have added claims 12-14. Following entry of these amendments, claims 1-3 and 5-14 are pending in the application. The PTO has withdrawn claim 5 from consideration as being drawn to non-elected subject matter.

Reconsideration of the present application is respectfully requested in view of the foregoing amendments and the remarks which follow.

Objections to the Drawings

On page 3 of the Office Action, the PTO has objected to the drawings, noting that the tables depicted in Figures 6-9 should be inserted into the specification and that Figures 6-9 should be deleted. With this response, Applicants have deleted Figures 6-9 and inserted the contents of these figures as Tables 1-4, respectively, into the specification. In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the outstanding objections to the drawings.

Objections to Specification

On page 3 of the Office Action, the PTO has objected to Applicants' references to Figures 6-9 as figures rather than tables. In this response, Applicants have amended the specification throughout to replace references to Figures 6-9 with Tables 1-4, respectively. Applicants have moved the text referring to Figures 6-9 in the Brief Description of the Drawings to the end of the specification and have, as previously noted, changed the references to Figures 6-9 to references to Tables 1-4, respectively. In view of these amendments, Applicants respectfully request reconsideration and withdrawal of the outstanding objections to the specification.

Rejections Under 35 U.S.C. §102

On page 3 of the Office Action, the PTO has rejected claims 1-3 under 35 U.S.C. §102(b) as being anticipated by JP 63-302950 (hereafter "JP '950"), and, on page 4 of the Office Action, the PTO has rejected claims 1 and 7 under 35 U.S.C. §102(b) as being anticipated by WO 97/42495 (hereafter "WO '495"). In addition, on page 5 of the Office Action, the PTO has rejected claims 1, 2 and 9 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 4,321,250 to Hart (hereafter "Hart"), and, on page 5 of the Office Action, the PTO has rejected claims 1-3 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 4,126,580 to Lauder (hereafter "Lauder"). As set forth below, Applicants respectfully traverse this rejection.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See generally MPEP §2131. Here, none of the cited references disclose that "the perovskite composite oxide works as a catalyst in the following reactions (f1) or (f2)" where (f1) is the reaction " $\text{CH}_3\text{OH} + \text{H}_2\text{O} \rightarrow \text{CO}_2 + 3\text{H}_2$ " and (f2) is the reaction " $\text{CH}_3\text{OH} + 1/2\text{O}_2 \rightarrow \text{CO}_2 + 2\text{H}_2$ ". Based on this deficiency in the disclosure of each of the cited references, Applicants submit that the rejections under §102 of claim 1 and the claims which ultimately depend therefrom are improper and should be withdrawn.

With specific regard to JP '950, Applicants note that JP '950 relates to catalysts for purifying exhaust gas. Generally, the exhaust gas contains HC, NO_x, CO₂, but it does not contain methanol (CH₃OH). Therefore, there is no disclosure of a catalyst for methanol reforming in JP '950, and, as a result, the independent claim 1 is not anticipated by JP '950.

Further, with specific regard to Hart and Lauder, although Hart and Lauder disclose methods for producing hydrogen by reacting hydrocarbon, both of them fail to disclose a catalyst for the methanol reforming reactions (f1) and (f2) as set forth in amended claim 1.

Finally, with regard to claim 7, Applicants have amended claim 7 to clarify that "the catalyst composition works as a fuel electrode of the fuel cell". Since WO '945 fails to disclose such a catalyst, Applicants submit that the rejection under §102 is improper and should be withdrawn.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections under §102.

Rejections Under 35 U.S.C. §103

On page 5 of the Office Action, the PTO has rejected claims 1 and 9-11 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,165,633 to Negishi (hereafter "Negishi") in view of Lauder. Applicants respectfully traverse this rejection for the reasons set forth below.

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 180 USPQ 580 (CCPA 1974). See MPEP §2143.03. Neither Negishi nor Lauder, taken either individually or in combination, teach or properly suggest that "the perovskite composite oxide works as a catalyst in the following reactions (f1) or (f2)" where (f1) is the reaction " $\text{CH}_3\text{OH} + \text{H}_2\text{O} \rightarrow \text{CO}_2 + 3\text{H}_2$ " and (f2) is the reaction " $\text{CH}_3\text{OH} + 1/2\text{O}_2 \rightarrow \text{CO}_2 + 2\text{H}_2$ " as recited in amended claim 1. Accordingly, Applicants submit that the rejection of claim 1 under §103 is improper and should be withdrawn.

If an independent claim is nonobvious under §103, then any claim depending therefrom is nonobvious. In re Fine, 5 USPQ2d 1596 (Fed. Cir. 1988). See MPEP 2143.03. Thus, Applicants submit that claims 9-11, which ultimately depend from independent claim 1, are also non-obvious.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of this rejection under §103.

Allowable Subject Matter

Applicants acknowledge, with appreciation, the PTO's indication that claim 8 would be allowable if rewritten in independent form. In view of the PTO's indication, Applicants have rewritten claim 8 in independent form. Accordingly Applicants submit that claim 8 is now in allowable form.

Newly Added Claims

In this response, Applicants have added claims 12-14. With regard to claim 12, Applicants note that this claim depends from claim 1 and uses the transitional phrase "consisting essentially of" which limits the scope of the claim to those materials recited in the claim and those that do not materially affect the basic and novel properties of the claimed invention. With regard to claims 13 and 14, Applicants note that these method of use claims are being added as potentially rejoinable under the provisions of MPEP §821.04. Applicants submit that the cited art, taken either individually or in combination, fails to teach or fairly suggest the claimed subject matter.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully submit that all of the pending claims are now in condition for allowance. An early notice to this effect is earnestly solicited. If there are any questions regarding the application, the Examiner is invited to contact the undersigned at the number below.

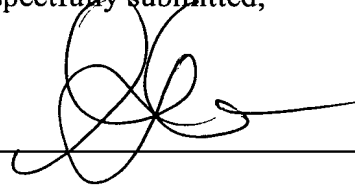
The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date

6/19/03

By



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